AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1-30. (Cancelled)

31.   (Currently Amended) A liquid crystal display device, comprising:

a liquid crystal panel having a plurality of gate lines and data lines crossing each other, and having red (R), green (G) and blue (B) pixels arranged in a matrix pattern;

a light source transmitting light through the R, G, and B pixels creating red, green, and blue colors respectively;

a gate driving unit for applying scan signals to the gate lines;

a lookup table for storing gray scale values of image information including R, G and B data, and storing where a gray scale value of a gray level of the B data prior to that is lower than a gray level at which a color reproducibility saturation is reduced, is stored as a gray scale value of gray levels that are higher than from the gray level at which the color reproducibility saturation is reduced to an uppermost gray level,

wherein the lookup table includes a same initial gray scale value of at least one of the R and G data for all gray levels prior to a gray level at which [[a]] the color reproducibility saturation is reduced and the lookup table includes different gray scale values of the R and G data to mix with the B gray scale values from a gray level at which the color reproducibility saturation is reduced to an uppermost gray level;

a data processing unit for compensating image information according to the gray scale values in the lookup table; and

a data driving unit for receiving the compensated image information and applying the compensated image information to the data lines.

32.   (Currently Amended) The LCD device of claim 31, wherein the gray scale value of the gray levels of the B data prior to a gray level at which a color reproducibility saturation is

reduced is the same as the gray scale value of the gray levels from the gray level at which a color reproducibility is reduced to the uppermost gray level.

33. (Previously Presented) The LCD device of claim 31, wherein the B data has 64 gray levels.

34. (Currently Amended) The LCD device of claim 31, wherein the gray level at which a color ~~reproducibility~~ saturation is reduced among the B data is a 52nd gray level.

35. (Currently Amended) The LCD device of claim 31, wherein the gray level prior to a gray level where a color ~~reproducibility~~ saturation is reduced among the B data is a 51st gray level.

36. (Currently Amended) A method for improving a color reproducibility of a liquid crystal display (LCD) device, the method comprising:

detecting a gray scale value of a gray level at which a color ~~reproducibility~~ saturation is reduced, and a gray scale value of a gray level ~~prior to~~ that is lower than the gray level at which a color ~~reproducibility~~ saturation is reduced, by measuring a color displayed on a liquid crystal panel with increasing gray scale values of B data among image information including R, G and B data;

storing the gray scale value of the gray level of the B data ~~prior to~~ that is lower than the gray level at which a color ~~reproducibility~~ saturation is reduced, as a gray scale value of gray level ~~from~~ that are higher than the gray level at which a color ~~reproducibility~~ saturation is reduced ~~to an uppermost bit~~;

storing a same initial gray scale value of at least one of the R and G data for all gray levels prior to a gray level at which a color ~~reproducibility~~ saturation is reduced and including different gray scale values of the R and G data to mix with the B gray scale values from a gray level at which the color ~~reproducibility~~ saturation is reduced to an uppermost gray level;

compensating the image information according to the gray level and mixing the gray scale values of at least two of R, G, and B data; and

applying the compensated image information to data lines of the liquid crystal panel.

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37.   (Currently Amended) The method of claim 36, wherein the gray scale value of the gray level prior to the gray level at which a color ~~reproducibility~~ saturation is reduced is same as the gray scale value of gray levels from the gray level at which a color ~~reproducibility~~ saturation is reduced to the uppermost bit.

38.   (Previously Presented) The method of claim 36, wherein the B data has 64 gray levels.

39.   (Currently Amended) The method of claim 36, wherein the gray level at which a color ~~reproducibility~~ saturation is reduced among the B data is a 52nd gray level.

40.   (Currently Amended) The method of claim 36, wherein the gray level prior to a gray level where a color ~~reproducibility~~ saturation is reduced among the B data is a 51st gray level.

41.   (Currently Amended) The liquid crystal display device of claim [[1]] 31, wherein the lookup table includes the same initial gray scale value for both R and G data.

42.   (Previously Presented) The method of claim 36, wherein the same initial gray scale value is the same for both the R and G data.